MATERIAL SAFETY DATA SHEET



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DATE PREPARED: 07/20/1995

MSDS No: 6030

ORTHO® Pruning Sealer

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: ORTHO® Pruning Sealer Product Description: Aerosol Pruning Sealer

MANUFACTURER:

The SOLARIS Group of Monsanto Company P.O. Box 5008 San Ramon, CA 94583-0808 24 HR. EMERGENCY TELEPHONE

NUMBERS:

Emergency Phone

800-454-2333

EPA Reg. No.:

PN: 1000-114

2. COMPOSITION/INFORMATION ON INGREDIENTS

 $\mathrm{wt}.\%$

CAS Registry #

INERT INGREDIENTS

 ~ 100.0

"Inert Ingredients" is a term defined by the U.S. Environmental Protection Agency under the Federal Insecticide, Fungicide, and Rodenticide Act (40 CFR 158.153). It refers to any substance, other than an active ingredient, which is intentionally added to a pesticide product. Some inert ingredients may be hazardous chemicals, as defined by the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). The hazards associated with these inert ingredients have been included in this document.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE:

Black liquid in aerosol canister

IMMEDIATE CONCERNS:

- HARMFUL IF SWALLOWED
- AVOID CONTACT WITH EYES, SKIN OR CLOTHING
- FLAMMABLE
- CONTENTS UNDER PRESSURE
- KEEP OUT OF REACH OF CHILDREN

POTENTIAL HEALTH EFFECTS

EYES:

The eye irritation potential of this substance has not been determined. However, based on data from similar materials, it may produce slight eye irritation, e.g. discomfort, redness, swelling and blurred vision.



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SKIN:

The skin irritation potential of this substance has not been determined. However, based on data from similar material, it may be a moderate skin irritant. Symptoms may include discomfort, redness, swelling and possibly blistering. The systemic toxicity of this substance has not been determined. However, it should be practically non-toxic to internal organs if it gets on the skin.

INGESTION:

The systemic toxicity of this substance has not been determined. However, based on data from similar material, it should be practically non-toxic to internal organs if swallowed.

INHALATION:

The systemic toxicity of the concentrated product has not been determined. However, based on data from similar material, the diluted product is considered practically non-toxic to internal organs if inhaled.

4. FIRST AID MEASURES

EYES:

Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. Call a physician if irritation persists.

SKIN:

If on skin, remove contaminated clothing, wash skin with plenty of soap and water. Wash contaminated clothing before reuse. If irritation persists, see a doctor.

INGESTION:

If swallowed, immediately telephone a poison control center, emergency treatment center or a physician for advice. DO NOT make person vomit unless directed to do so by medical personnel. If medical advice cannot be obtained, then immediately take person and product container, with label, to an emergency treatment center.

INHALATION:

If respiratory discomfort or irritation occurs, move the person to fresh air. See a doctor if discomfort or irritation continues.

ADDITIONAL INFORMATION:

In case of medical emergencies involving this product, call day or night, (800) 454-2333.

5. FIRE FIGHTING MEASURES

Flashpoint and Method: 92 to 94°C TAG CC

FLAMMABLE CLASS:

N.F.P.A (Code 30B) Level I Aerosol



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EXTINGUISHING MEDIA:

CO2, Dry Chemical, Foam and Water Fog.

HAZARDOUS COMBUSTION PRODUCTS:

Hydrocarbon fumes and smoke. Carbon monoxide where combustion is incomplete.

FIRE FIGHTING PROCEDURES:

For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of normal products of combustion or oxygen deficiency. Read the entire document.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL:

Soak up spilled material with paper towels and discard in trash.

LARGE SPILL:

Liquid spills on floor or other impervious surfaces should be contained or diked, and should be absorbed with attapulgite, bentonite or other absorbent clays. Collect contaminated absorbent, place in plastic-lined metal drum and dispose of in accordance with instructions provided under Section 13. "DISPOSAL". Thoroughly scrub floor or other impervious surface with a strong industrial type detergent solution and rinse with water.

For liquid spills that soak into the ground, contact the applicable Federal, State and or County Health Dept. for disposal recommendations. If disposal is required then refer to Section 13 "DISPOSAL" for instructions.

Leaking containers should be separated from non-leakers and either the container or its contents transferred to a drum or other non-leaking container and disposed of in accordance with instructions provided under Section 13 "Disposal". Any recovered spilled liquid should be similarly collected and disposed of.

Do not contaminate water, foodstuffs or feed by storage or disposal.

GENERAL PROCEDURES:

Observe all protection and safety precautions when cleaning up spills – see Section 8. "EXPOSURE CONTROLS/PERSONAL PROTECTION". For help with any spill, leak, fire or exposure involving this material, call day or night (800) 454-2333.



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7. HANDLING AND STORAGE

GENERAL PROCEDURES:

READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL. Store in accordance with NFPA 30B for a Level I aerosol. DO NOT USE OR STORE near flame, sparks or hot surfaces. USE ONLY IN WELL VENTILATED AREA. CONTAINER UNDER PRESSURE. Exposure to heat or prolonged exposure to sun may cause container to burst. Do not puncture, incinerate or store above 130F.

Storage Temperature: 120°F maximum

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

No special ventilation is normally required. However, if operating conditions create airborne concentrations which exceed the recommended exposure standards (in Section 8), then special ventilation may be required.

PERSONAL PROTECTION

EYES AND FACE:

For application of product in accordance with label instructions, no special eye protection is needed.

Handling of the product is not likely to present an eye exposure concern during normal handling. In the event of an accidental discharge of the material during manufacture or handling which could cause eye contact, workers should wear goggles or a face shield.

SKIN:

No special skin protection is usually necessary. Avoid prolonged or frequently repeated skin contact with this material. Skin contact can be minimized by wearing protective clothing. Wash throughly with soap and water after handling.

RESPIRATORY:

Handling of the product is not likely to present an airborne exposure concern during normal handling. In the event of an accidential discharge of the material during manufacture or handling which produces a heavy mist, workers should put on respiratory protection equipment. Consult respirator manufacturer to determine appropriate type of equipment. Observe respirator use limitations specified by NIOSH MSHA or the manufacturer.

For application of product in accordance with label instructions, no special respiratory protection is required.



2-butoxy-Ethanol n-Butyl alcohol 2-Butanol Carbon black Dimethyl Ether Page: 5 of 8

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OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200):

EXPOSURE LIMITS

OSHA PEL
25 ppm
$50~\mathrm{ppm}$
100 ppm
3.5 mg/m3
None

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Aerosol

Odor: Alcohol
pH: ~8.2 to 9.5
Percent Volatile: 80
Vapor Pressure: 70 PSIG

Vapor Density: No data Available Boiling Point: No Data Available

Freezing Point: <0°C

Solubility in Water: Not Known

Evaporation Rate: <1 (n-Butyl Acetate=1)

Specific Gravity: 1.01 gr/cc

Viscosity: ~230 to 250 cps (Brookfield)

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

CONDITIONS TO AVOID

INCOMPATIBLE MATERIALS:

May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

11. TOXICOLOGICAL INFORMATION

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA:

No data available.



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ECOTOXICOLOGICAL INFORMATION:

No data available.

13. DISPOSAL CONSIDERATIONS

FOR LARGE SPILLS:

Material collected that cannot be chemically reprocessed should be disposed of in a landfill approved for disposal or in accordance with applicable regulations. Contact local environmental or health authorities for approved disposal of this material.

PRODUCT DISPOSAL:

The Solaris Group is committed to responsible environmental practices and recommends that all of the product be used up, carefully following all label directions and precautions.

If necessary to dispose of partially filled product container, then securely wrap it in several layers of newspaper and discard in trash.

EMPTY CONTAINER:

Replace cap and discard container in trash.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

Proper Shipping Name: Consumer Commodity

Hazard Class: ORM-D NA/UN Number: None Packing Group: No

U.S. Surface Freight Class: NMFC NBR. 102120

AIR (I.C.A.O.)

Proper Shipping Name: Consumer Commodity

SPECIAL SHIPPING NOTES:

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

PRODUCT	CLASSIFICAT	ION UNDE	R SECTION 311	OF SARA
Acute: Yes	Chronic: No	Fire: Yes	Reactivity: No	Pressure Generating: Yes



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TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA Regulatory: All components are on the US EPA's TSCA Inventory List.

REGULATIONS

International Regulations: WHMIS Classification: A, D1A, D2A, D2B

16. OTHER INFORMATION

Hazard Rating Systems: This information is for people trained in the use of the following hazard identification systems. National Paint & Coatings Association's (NPCA) "Hazardous Materials Identification System" (HMIS) and the National Fire Protection Association's (NFPA) Hazard Diamond.

HMIS Rating

Health	3
Flammability	1
Reactivity	0
Protection	-

Key

4 = Severe

3 = Serious

2 = Moderate

1 = Slight

0 = Minimal

Approval date: 09/12/1995

REVISION SUMMARY

New MSDS

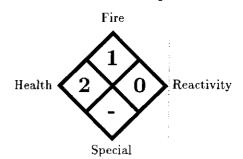
COMMENTS:

For additional information concerning this product, call the SOLARIS Groups Consumer Helpline at 800-225-2883.

MANUFACTURER DISCLAIMER:

This Material Safety Data Sheet (MSDS) contains health, safety and environmental information for you and your employees. It does not replace the precautionary language, use directions, or the storage and disposal information found on the product label. Information contained in this MSDS will help you to prepare for emergency response and to meet community right-to-know, emergency response and reporting requirements under SARA Title III and many other laws. Emergency response agencies and health care providers will also find this additional information useful.

NFPA Rating





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Use of this product is regulated by the U.S. Environmental Protection Agency (EPA) through the approved label copy. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Although the information and recommendations set forth herein (herinafter "Information") are presented in good faith and believed to be correct as of the date hereof, Monsanto Company and The Solaris Group make no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determinations as to its suitability for their purposees prior to use. In no event will Monsanto Company or The Solaris Group be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.